

METHOD AND SYSTEM FOR TEMPERATURE ESTIMATION OF GAS TURBINE COMBUSTION CANS

Abstract of Disclosure

A method for estimating a temperature profile for individual combustion cans at an inlet of a gas turbine is disclosed. In an exemplary embodiment, the method includes determining an exhaust temperature profile of exhaust gas of the gas turbine, and inputting the exhaust temperature profile into a model-based estimator of turbine components through which turbine gas flows. The model-based estimator calculates an estimated inlet temperature profile at the gas turbine inlet, based upon the exhaust temperature profile and design parameters of the gas turbine, the estimate inlet temperature profile being indicative of the actual firing temperature of each of the individual combustion cans.